



PATENT ABSTRACTS OF JAPAN

(11) Publication number: **02295970 A**

(43) Date of publication of application: 06 . 12 . 90

(51) Int. Cl.

C07D209/08**C12P 7/22****C12P 17/10**

/(C12P 7/22 , C12R 1:645) , (C12P 17/10 , C12R 1:645 , C12R 1:72 , C12R 1:84 , C12R 1:80 , C12R 1:77 , C12R 1:85 , C12R 1:15 , C12R 1:88)

(21) Application number: **01115039**(71) Applicant: **ASAHI CHEM IND CO LTD**(22) Date of filing: **10 . 05 . 89**(72) Inventor: **OTSUBO KAZUMASA
YAMANOUCI TAKENAGA**(54) **PREPARATION OF OPTICALLY ACTIVE
PROPANE-2-OL DERIVATIVE**

a drug such as an antihypertensive agent or an antiarrhythmic agent.

(57) Abstract:

COPYRIGHT: (C)1990,JPO&Japio

PURPOSE: To profitably prepare the subject optically active compound in a high yield under the ordinary temperature and the ordinary pressure by reducing the aliphatic ketone group of a propane-2-one derivative corresponding to the objective compound with a microorganism, etc., capable of stereospecifically reducing the ketone group into a hydroxyl group.

CONSTITUTION: The aliphatic ketone group of a compound of formula I (R is arbitrarily substitutable phenyl, naphthyl or indole) is reduced with a microorganism such as *Brakesia.trispora* NRRL 2895 capable of stereospecifically reducing the ketone group into a hydroxyl group or an enzymatic product thereof at 5-50°C, preferably at 20-37°C at a pH of 4-11, preferably 6.4-8.0, to prepare the objective optically active compound of formula III in a high purity under conditions of the ordinary temperature and the ordinary pressure from the optically inactive substance as the raw material. The objective compound of formula III can be readily converted with e.g. isopropylamine into an optically active β -blocking agent of formula II useful as

